



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,954	11/21/2003	John T. Coffey	TI-35948 (1962-05900)	4427
23494	7590	08/01/2006	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			LE, DANH C	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,954

Applicant(s)

COFFEY, JOHN T.

Examiner

DANH C. LE

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-19 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

SET I

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1-4, 6-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Mangold (US 2002/0093929).

As to claim 1, Mangold teaches a wireless device that is adapted to communicate wirelessly with a class 1 device and a class 2 device, wherein the class 2 device is capable of communicating in a manner that is not compatible with the class 1 device (figures 1-4, 7, 8 and their descriptions), the wireless device comprising:

host logic

an antenna, and

a medium access control coupled the host logic and the antenna wherein the MAC causes the wireless device to emit a poll that is recognized differently by the class 1 device as compared to the class 2 device and causes the wireless device to operate for a reserved period of time in which the class 2 device can communicate in a manner that is not compatible with the class 1 device.

As to claim 2, Mangold teaches the wireless device of claim 1 wherein, during the reserved period of time, the class 2 device uses a preamble that does not comport with preambles associated with the class 1 device (figures 1-4, 7, 8 and their descriptions)

As to claim 3, Mangold teaches the wireless device of claim 1 wherein, following the reserved period of time, the MAC of the wireless device permits the class 1 device to communicate (figures 1-4, 7, 8 and their descriptions)

As to claim 4, Mangold teaches the wireless device of claim 1 wherein, following the reserved period of time, the MAC of the wireless device permits the class 1 and class 2 devices to communicate in a manner that is compatible with the class 1 devices (figures 1-4, 7, 8 and their descriptions)

As to claim 6, Mangold teaches the wireless device of claim 1 wherein the wireless device comprises an access point (figures 1-4, 7, 8 and their descriptions)

As to claim 7, the claim is a system claim of claim 1; therefore, the claim is interpreted and rejected as set forth as claim 1.

As to claim 8, Mangold teaches the wireless network of claim 7 wherein the period of time is determined from the multi-device class poll (figures 1-4, 7, 8 and their descriptions).

As to claim 9, Mangold teaches the wireless network of claim 7 wherein, following the period of time, the access point permits the class 1 devices to communicate on the network (figures 1-4, 7, 8 and their descriptions).

As to claim 10, Mangold teaches the wireless network of claim 7 wherein, following the period of time, the access point permits both class 1 and class 2 devices to communicate on the network (figures 1-4, 7, 8 and their descriptions).

As to claim 11, Mangold teaches the wireless network of claim 10 wherein, during the period of time, the class 2 devices communicate correctly by the class 1 on the network using preambles that cannot be interpreted devices, and wherein, following the period of time, the access point permits both class 1 and class 2 devices to communicate on the network using preambles that the class 1 devices can interpret (figures 1-4, 7, 8 and their descriptions).

As to claim 12, Mangold teaches the wireless network of claim 7 wherein each class 1 device comprises a unique address and the multi-device class poll includes a predetermined address that does not correspond to an address of any of the class 1 devices (paragraph 43, 48).

As to claim 13, Mangold teaches the wireless network of claim 12 wherein the predetermined interpreted by each class 2 device as signifying a beginning of the period of time (paragraph 43, 48).

As to claim 14, Mangold teaches the wireless network of claim 7 wherein, during the period of time, the class 2 devices use a preamble that does not comport with preambles associated with the class devices (figures 1-4, 7, 8 and their descriptions)

As to claim 15, the claim is a method claim of claim 1; therefore, the claim is interpreted and rejected as set forth as claim 1.

As to claim 16, Mangold teaches the method of claim 15 further comprising emitting a poll that contains an address that does not correspond to any of the first plurality of devices (figures 1-4, 7, 8 and their descriptions).

As to claim 17, Mangold teaches the method of claim 15 further comprising emitting a poll that contains an address that does not correspond to any of the first plurality of devices and that is interpreted by the second plurality of devices as defining the specified time period during which the second plurality of devices is permitted to communicate in a manner that is incompatible with the first plurality of devices (figures 1-4, 7, 8 and their descriptions).

As to claim 18, Mangold teaches the method of claim 15 further comprising, following the specified time period, permitting the first plurality of devices to communicate on the wireless network (figures 1-4, 7, 8 and their descriptions).

As to claim 19, Mangold teaches the method of claim 15 further comprising, following the specified time period, permitting the first plurality and second plurality of devices to communicate on the wireless network in a manner that is compatible with the first plurality of devices (figures 1-4, 7, 8 and their descriptions).

SET II

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-11, 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeshima (US 6,876,850) in view of Schieltz (US 5,659,787).

As to claim 1, Maeshima teaches a wireless device that is adapted to communicate wirelessly with a class 1 device and a class 2 device, wherein the class 2 device is capable of communicating in a manner that is not compatible with the class 1 device (figure 2, 1, 16), the wireless device comprising:

host logic (21A, B)

an antenna (26A, B), and

a medium access control (22A, B) coupled the host logic and the antenna wherein the MAC causes the wireless device to recognize differently by the class 1 device as compared to the class 2 device and causes the wireless device to operate for a reserved period of time in which the class 2 device can communicate in a manner that is not compatible with the class 1 device.

Maeshima fails to teach terminal device emit a poll. Schieltz teaches terminal device emit a poll (col.8, lines 32-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Schieltz into the system of Maeshima in order to enhance the data communication network with highly efficient polling procedure.

As to claim 2, Maeshima teaches the wireless device of claim 1 wherein, during the reserved period of time, the class 2 device uses a preamble that does not comport with preambles associated with the class 1 device (figure 16)

As to claim 3, Maeshima teaches the wireless device of claim 1 wherein, following the reserved period of time, the MAC of the wireless device permits the class 1 device to communicate (17A-G)

As to claim 4, Maeshima teaches the wireless device of claim 1 wherein, following the reserved period of time, the MAC of the wireless device permits the class 1 and class 2 devices to communicate in a manner that is compatible with the class 1 devices (figure 28A-G)

As to claim 6, Maeshima teaches the wireless device of claim 1 wherein the wireless device comprises an access point (figure 1)

As to claim 7, the claim is a system claim of claim 1; therefore, the claim is interpreted and rejected as set forth as claim 1.

As to claim 8, Maeshima teaches the wireless network of claim 7 wherein the period of time is determined from the multi-device class poll (figure 17, 18).

As to claim 9, Maeshima teaches the wireless network of claim 7 wherein, following the period of time, the access point permits the class 1 devices to communicate on the network (figure 1).

As to claim 10, Maeshima teaches the wireless network of claim 7 wherein, following the period of time, the access point permits both class 1 and class 2 devices to communicate on the network (figure 18).

As to claim 11, Maeshima teaches the wireless network of claim 10 wherein, during the period of time, the class 2 devices communicate correctly by the class 1 on the network using preambles that cannot be interpreted devices, and wherein, following the period of time, the access point permits both class 1 and class 2 devices to communicate on the network using preambles that the class 1 devices can interpret (figure 16, 18).

As to claim 14, Maeshima teaches the wireless network of claim 7 wherein, during the period of time, the class 2 devices use a preamble that does not comport with preambles associated with the class devices (figure 18A-G).

As to claim 15, the claim is a method claim of claim 1; therefore, the claim is interpreted and rejected as set forth as claim 1.

As to claim 16, Maeshima teaches the method of claim 15 further comprising emitting a poll that contains an address that does not correspond to any of the first plurality of devices (col.8, lines 10-21).

As to claim 17, Maeshima teaches the method of claim 15 further comprising emitting a poll that contains an address that does not correspond to any of the first plurality of devices and that is interpreted by the second plurality of devices as defining the specified time period during which the second plurality of devices is permitted to communicate in a manner that is incompatible with the first plurality of devices (col.8, lines 10-21).

As to claim 18, Maeshima teaches the method of claim 15 further comprising, following the specified time period, permitting the first plurality of devices to communicate on the wireless network (figure 17A-G).

As to claim 19, Maeshima teaches the method of claim 15 further comprising, following the specified time period, permitting the first plurality and second plurality of devices to communicate on the wireless network in a manner that is compatible with the first plurality of devices (figure 18A-G).

3. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeshima and Schieltz in view of Mangold (US 2002/0093929).

As to claim 12 and 13, Maeshima and Schieltz teaches the wireless network of claim 7 wherein each class 1 device comprises a address and the multi-device class poll. Maeshima and Schieltz fails to teach a predetermined address that does not correspond to an address of any of the class 1 devices and the predetermined address is interpreted by each class 2 device as signifying a beginning of the period of time. Mangold teaches a predetermined address that does not correspond to an address of any of the class 1 devices and the predetermined address is interpreted by each class 2 device as signifying a beginning of the period of time (paragraph 037, 039). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Mangold into the system of Maeshima and Schieltz in order to enhance the system performance of the radio communication method.

Allowable Subject Matter

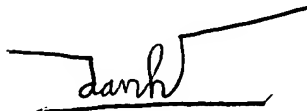
Claim 5 is objected in the previous Office Action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C. LE whose telephone number is 571-272-7868. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



July 20, 2006

DANH CONG LE
PRIMARY EXAMINER